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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,210	04/22/2005	John Perrier	A-9547	6771

20741 7590 02/28/2007  
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ARLINGTON, VA 22202-3843

EXAMINER
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LARYEA, LAWRENCE N

ART UNIT	PAPER NUMBER
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3768

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/28/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/532,210

Applicant(s)

PERRIER, JOHN

Examiner

Lawrence N. Laryea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 11-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 April 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 22 APR 2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11, 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hughes (Patent 6058932)** in view of **Schechter et al (Patent 5058600)**.

3. Re Claims 11,12 and 22: **Hughes** discloses an apparatus for inducing a coughing reflex in a living being, an ultrasonic wave generation means for producing ultrasonic vibrations in said transducer of a frequency suitable for at least limited penetration of soft body tissue whereby to stimulate a reflexive coughing response in living being (**See Col. 1, line 18-21, Col. 12, line 49-65, and Col. 2, line 39-51**) and an active portion to detect one or more body (airways) function **See (Col. 2, line 33-44)**.

4. **Hughes** disclose an apparatus for inducing a coughing reflex in a living being, an ultrasonic wave generation means for producing ultrasonic vibrations in said transducer of a frequency suitable for at least limited penetration of soft body tissue whereby to stimulate a reflexive coughing response in living being but does not disclose the apparatus is adapted to be place in contact region of the neck.

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5. **Schechter et al** disclose an apparatus wherein an ultrasonic transducer is adapted to be place in contact region of the neck (**See Col. 2, line 6-21 and Col. 3, line 1-5**).

It would have been obvious to one having ordinary skill in the art at the time invention was made to modify the apparatus for inducing a coughing reflex in a living being of **Hughes** similar to that of **Schechter et al** wherein the ultrasonic transducer is adapted to be place in contact region of the neck in order to provide rapid and accurate diagnostic of the location and degree of obstruction in the upper airway of a patient without exposing the patient to any undesired side effects (**See Col. 2, line 8-16**) as taught by **Schechter et al**.

6. Claims 13-21,23-27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hughes** in view of **Schechter et al** and further view **Erickson et al** (**5269747**).

7. **Hughes** and **Schechter et al** disclose the claimed invention , see rejection supra; however **Hughes** and **Schechter et al** do not disclose an ultrasonic transducer device (also used as an applicator) wherein a support comprises an arcuate member having a concave side and a convex side, said arcuate member having central attachment means on said convex side for mounting said member to said main body and wherein said transducers are arranged symmetrically on opposite sides of said attachment means. Also, the ultrasonic transducer device comprises two transducers which are flexibly mounted relative to one another, adjustable means to adjust the device to a target area and two stage switches which are used to regulate the energy

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flow of the device. However **Hughes** discloses apparatus comprises an elongated main body (12) and an applicator assembly comprising a transducer support mounted (36) to one end of said main body.

8. **Erickson** discloses an ultrasonic transducer device (also used as an applicator) wherein a support comprises an arcuate member having a concave side and a convex side, said arcuate member having central attachment means on said convex side for mounting said member to said main body and wherein said transducers are arranged symmetrically on opposite sides of said attachment means. Also, the ultrasonic transducer device comprises two transducers (12 and 14) which are flexibly mounted relative to one another, adjustable means to adjust the device to a target area (See Col. 2, line 44-52) and two stage switches which are used to regulate the energy flow of the device (See Col. 6, line 20-31).

Therefore, it would have been obvious to one having ordinary skill in the art at the time invention was made to modify the apparatus for inducing a coughing reflex in a living being of **Hughes and Schechter et al** similar to that of **Erickson** wherein an ultrasonic transducer device (also used as an applicator) support comprises an arcuate member having a concave side and a convex side, said arcuate member having central attachment means on said convex side for mounting said member to said main body and wherein said transducers are arranged symmetrically on opposite sides of said attachment means. Also, the ultrasonic transducer device comprises two transducers which are flexibly mounted relative to one another, adjustable means to adjust the device to a target area and two stage switches which are used to regulate the energy

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flow of the device in order to make the ultrasonic transducer device portable to be attach to target area.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hughes** in view of **Schechter et al** and further view of **Erickson et al** in view of **Barnes et al** (Pub. 2003/0078501).

10. The combination of **Hughes, Schechter et al and Erickson et al** disclose the invention claimed, see rejection supra: however the combination does not explicitly disclose the main body has a holding handle.

11. **Barnes et al** disclose an ultrasonic transducer device wherein the main body has a holding handle.

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to modify the apparatus for inducing a coughing reflex in a living being of **Hughes** similar to that of **Schechter et al** wherein the ultrasonic transducer is adapted to be place in contact region of the neck in order to provide rapid and accurate diagnostic of the location and degree of obstruction in the upper airway of a patient without exposing the patient to any undesired side effects and in view of **Erickson et al** double-transducer system to have an ultrasonic transducer device wherein the main body has a holding handle similar to that of **Barnes et al** in order to manipulate or hold the ultrasonic transducer device during medical examination procedures.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Lurie et al (6312399)** disclose an ultrasonic transducer device for inducing a coughing reflex in a living being wherein a device is attached to the neck of a patient.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence N. Laryea whose telephone number is 571-272-9060. The examiner can normally be reached on 9:30 a.m.-5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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LNL

*Shallenger*  
*EEV1 MARS READER*  
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